Nutrition

Co~Chairs ...

***Linda Nebeling**, NIH/NCI*
***Deborah Toobert**, Oregon Research Institute*
***Geoff Greene**, University of Rhode Island*
***Karen Peterson**, Harvard School of Public Health*

Key Members ...

***Melena Anatchkova**, University of Rhode Island; **Rosemary Breger**, Oregon Health & Science University; **Phil Clark**, University of Rhode Island; **Rebecca Costello**, NIH/ODS; **Carol DeFrancesco**, Oregon Health & Science University; **Diane Elliot**, Oregon Health & Science University; **Mary Kay Fox**, Harvard School of Public Health; **James Hebert**, University of South Carolina (HSPH); **Andrea Heffernan**, Rush Presbyterian/ITT; **Tom Hurley**, University of South Carolina (HSPH); **Victor Kipnes**, NIH/NCI; **Holly McGregor**, University of Rochester; **Gail Osterman**, Illinois Institute of Technology; **Ken Resnicow**, Emory University; **Sue Rossi**, University of Rhode Island; **Judy Salkeld**, Harvard School of Public Health; **Tammy Sher**, Illinois Institute of Technology; **Reema Singla**, Illinois Institute of Technology; **Lisa Strycker**, Oregon Research Institute; **Fran Thompson**, NIH/NCI; **Terry Wang**, Emory University; **Geof Williams**, University of Rochester; **Helen Wright**, Penn. State University;*

Mission ...

The BCC Nutrition workgroup provides a unique opportunity to assess common measures across sites. The BCC Validation Study, a project of the BCC Nutrition Workgroup, maximizes the unique attributes of a multi-center, longitudinal database and was funded by the National Cancer Institute (NCI). Its primary aim is to validate NCI's self-report measures among diverse samples participating in intervention trials to reduce risk of chronic diseases, including cancer. Supplemental funding from NCI for each project augments the original grant proposal in order to assess the validity of dietary intake estimates based on short screeners compared with multiple 24-hour recalls and/or biochemical assays. Three common dietary measures were chosen to assess intakes at baseline and change due to interventions: 1) NIH Revised Fruit and Vegetable Screener (FVS); 2) NIH Fat Screener (FS); 3) Kristal's Fat and Fiber Behavior Questionnaire. Secondary analyses, also funded by NCI, address methodologic aspects of self-report measures, i.e., factors affecting accuracy and precision of estimates of dietary intake in diverse populations over time and in response to intervention.

Specific Aims ...

- [•] Evaluate the correlation and limits of agreement between servings of F&V estimated from the FVS and servings calculated from the mean intake on three 24-hour recalls.
- [•] Analyze the correlation and limits of agreement between fat intake estimated form the FS and fat intake calculated from the mean intake on three 24-hour recalls.
- [•] Evaluate the sensitivity of these instruments to measure dietary change after behavioral interventions designed to increase fruit and vegetable consumption and/or decrease fat consumption.

- [•] Compare FVS baseline estimates of fruit and vegetable intake as well as change in intake over time with serum carotenoids, retinol, tocopherol, and folate.
- [•] Compare FS baseline estimates of fat intake as well as change in intake over time with serum cholesterol, HDL, triglycerides and LDL.
- [•] Pool the analyses from each participating BCC site to allow for subgroup analyses.
- [•] Calculate the amount of bias in screener estimates of dietary intake of fruit and vegetable and total fat due to social desirability trait.

Major Highlights ...

- [•] Developed the BCC Diet Validation Study, Phase I, funded by the National Cancer Institute.
- [•] Developed the BCC Diet Validation Study, Phase II, funded by the National Cancer Institute.
- [•] Presentations of BCC Diet Validation Study baseline data at national/international meetings, i.e., International Society of Behavior, Nutrition and Physical Activity.
- [•] Developed publications process, as a group will coordinate joint publications on common projects/themes of analyses. Partners work in teams to champion publication topic areas for the group.
- [•] Effective partnerships with staff from participating sites; outside collaborators; NCI and ODS to support common project design and analyses. Institute staff have provided technical support as needed thorough out the duration of this project.
- [•] Establishment of a data coordination center for the Phase I (University of Rhode Island) / Phase II study (Harvard).

Collaborative Strategies ...

- [•] Regular communication using e-mail, monthly conference calls sponsored by NCI, and attendance at the BCC bi-annual meetings.
- [•] Active, dedicated participation by all sites involved in this project.
- [•] Providing timely response to requests for information and data across sites.
- [•] Maintaining a professional and collegial attitude.

Future Directions ...

- [•] A Dietary Supplement Use Study is being co-funded by the NIH Office of Dietary Supplements and OBSSR. The study will use existing data collected to understand patterns of dietary supplement use and their relationship to modifiable lifestyle behaviors associated with a range of chronic diseases in the United States.
- [•] NCI's Phase II supplement to the Diet Validation Study will continue this project until February, 2005. Funds will support the activities of the two co-coordination sites, planned data analyses, and development of publications.
- [•] NCI has agreed to continue to support monthly conference calls and will coordinate an annual meeting of the BCC Nutrition Workgroup for the duration of the supplemental funding.